METHODS AND APPARATUS FOR FACILITATING THE DETERMINATION OF GPS LOCATION INFORMATION FOR A MOBILE STATION WITHOUT DISRUPTING COMMUNICATIONS OF A VOICE CALL

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ABSTRACT

Methods and apparatus for facilitating the determination of Global Positioning System (GPS) location information for a mobile station without disrupting communications of a voice call (e.g. a 911 emergency call). In one illustrative example, the mobile station causes GPS navigational-type data to be regularly or periodically received and stored in memory prior to the voice call. At some point in time, the mobile station receives a voice call request to initiate the voice call. In response, the mobile station derives GPS assistance data based on the GPS navigational-type data. The mobile station then causes a GPS fix to be performed using the GPS assistance data, to thereby obtain GPS measurement data. Thereafter, the mobile station causes the voice call to be established and maintained through the wireless network. The GPS measurement data is transmitted to a location server for calculating the location of the mobile station.

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